

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 August 2005 (25.08.2005)

PCT

(10) International Publication Number
WO 2005/077389 A1

(51) International Patent Classification⁷: **A61K 35/66, 35/00**

(21) International Application Number: **PCT/US2005/003765**

(22) International Filing Date: 4 February 2005 (04.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/542,725 6 February 2004 (06.02.2004) US
60/563,996 20 April 2004 (20.04.2004) US

(71) Applicant (for all designated States except US): **THE UNIVERSITY OF CHICAGO [US/US]; 5801 South Ellis Avenue, Chicago, IL 60637 (US).**

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHANG, Eugene, B. [US/US]; The University of Chicago, Dept. of Medicine, G705 (MC 6084), 5841 S. Maryland Avenue, Chicago, IL 60637 (US). PETROF, Elaine, O. [US/US]; The University of Chicago, Dept. of Medicine, G705 (MC 6084), 5841 S. Maryland Avenue, Chicago, IL 60637 (US).**

(74) Agent: **MERKEL, William, K.; Marshall, Gerstein & Borun LLP, 6300 Sears Tower, 233 S. Wacker Drive, Chicago, IL 60606-6357 (US).**

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

A1

WO 2005/077389

(54) Title: AN ANTI-INFLAMMATORY, CYTOPROTECTIVE FACTOR DERIVABLE FROM A PROBIOTIC ORGANISM

(57) Abstract: The invention provides an isolated, anti-inflammatory, cytoprotective compound that is soluble in aqueous fluid, is derivable from the conditioned medium of a probiotic culture, such as VSL#3, induces heat shock protein expression, and has shown the capacity to inhibit NF- κ B activation. The compound is amenable to formulation in a pharmaceutical composition and to packaging in a kit form with instructions for use in methods according to the invention, which include methods of preventing, treating, or ameliorating a symptom of an inflammatory disorder, such as an inflammatory epithelial disease, e.g., inflammatory bowel disease, characterized by inflammation.